

CLAIMS:

1. An acrylic composition comprising an acrylic component selected from acrylic resins and precursors thereof and a nonoparticulate zinc oxide UV absorber wherein the acidity of the acrylic composition is less than 0.5g KOH per kilogram of resin solids.
2. An acrylic composition according to claim 1 wherein the zinc oxide component comprises at least 80% by weight of particles of size in the range of 10 from 10 to 100 nm.
3. An acrylic composition according to claim 2 wherein the zinc oxide component comprises at least 90% by weight in the range of from 10 to 50 nm.
4. A composition according to claim 1 wherein the zinc oxide is present in an amount of from loading 0.5%-50.0% by weight based on solids in acrylic resin.
5. An acrylic composition according to claim 1 where the acrylic component is selected from the group consisting of resins and monomer compositions for preparation thereof where a significant fraction of the monomeric units are selected from the group consisting of acrylic and methacrylic esters.
6. An acrylic composition according to claim 1 wherein the acrylic component comprises a high molecular weight thermoplastic acrylic resin.
7. An acrylic composition according to claim 1 wherein the acrylic component comprises a thermo setting acrylic resin or non-aqueous dispersion (NAD) acrylic which is a thermosetting solution.
8. An acrylic composition according to claim 1 in the form of an oil in water emulsion.

9. An acrylic composition according to claim 1 where the acrylic component comprises copolymers of acrylate and/or methacrylate esters of organic alcohols with other unsaturated monomers capable of reacting by additional polymerisation in aqueous media.

5

10. An acrylic composition according to claim 1 wherein the resin or precursor comprises acrylate and/or methacrylate ester monomers having alcohol portions selected from one or more of the groups of alkyl, hydroxyalkyl, alkoxyalkyl, alkylaminoalkyl and dialkylaminoalkyl.

10

11. An acrylic composition according to claim 1 wherein the acrylic component is an acrylic polymer resin in an aqueous emulsion.

12. An acrylic composition according to claim 8 wherein the organic solids

15 content is in the range of 10-60%.

13. An acrylic composition according to claim 1 prepared by milling zinc oxide in the presence of dispersants selected from the group consisting of surfactants and hydroxylated organic compounds and mixing the milled zinc 20 oxide dispersion with acrylic emulsion having an acidity of less than 0.5g KOH per kilogram of resin solids.

14. A method of manufacture of a zinc oxide stabilized acrylic composition comprising forming an acrylic composition having an acidity of less than 0.5g

25 KOH per kilogram of resin solids and dispersing therein a nanoparticulate zinc oxide composition.

15. An acrylic composition according to claim 1 wherein the acrylic component is acryclic monomer of acidity less than 0.5g KOH per kilogram

30 resin and forms a coating on the nanoparticulate zinc oxide.

16. A method of forming a zinc oxide stabilizing agent for an acrylic composition comprising:

contacting the zinc oxide nanoparticles with an acrylic monomer to form a coating of the monomer on the zinc nanoparticulates;

polymerizing a monomer composition comprising acrylic monomer in the presence of the acrylic monomer coated zinc oxide nanoparticles to provide
5 zinc oxide encapsulated in acrylic resin wherein the acidity of the acrylic resin is less than 0.5 g KOH per kilogram of resin.

17. A coating composition comprising and acrylic composition according to claim 1 one or more components selected from the group consisting of
10 surfactants, defoamers, chain transfer agents, plasticisers initiators and stabilisers.

18. A coating composition according to claim 17 applied to textiles.